

RENAULT NISSAN





RENAULT NISSAN
**CREATING A FUTURE OF
ZERO-EMISSION MOBILITY**



NISSAN GREEN PROGRAM 2010

Nissan's environmental ideal is a society where there is a 'symbiosis of people, vehicles and nature.' In working towards this goal, Nissan has established specific targets in its eco-action plan: 'Nissan Green Program 2010.'



NISSAN
GREEN PROGRAM



NISSAN'S APPROACH TO THE ENVIRONMENT

Seeking to attain a sustainable mobile society, Nissan is taking a proactive approach to finding solutions to environmental challenges such as CO2 reduction to mitigate global warming.



NISSAN
GREEN PROGRAM



HISTORY OF NISSAN'S EV

- 15 years of experience in lithium-ion battery/car application
- Late CY2010 launch all new pure electric vehicle



1998 Altra EV



2000 Hypermini



2008 Test Vehicle



2010 US, JPN



PIVO
2005 Tokyo MS

PIVO2
07 Tokyo MS

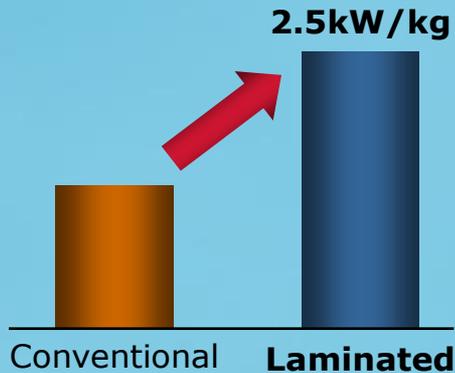
NUVU
2008 Paris MS



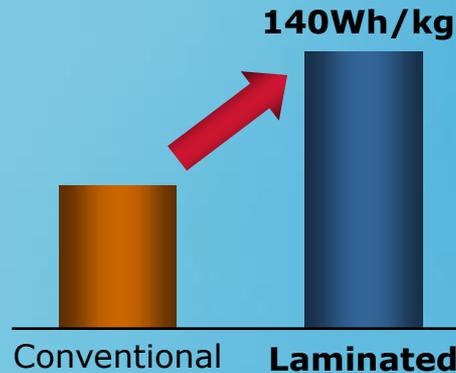
LITHIUM-ION BATTERY

- High reliability in automotive applications
- Ready for mass production

2X POWER



2X ENERGY

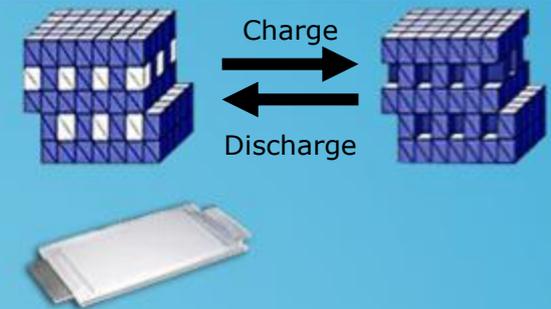


1/2 SIZE



Achieved High Reliability

- High heat stability with the use of manganese positive electrodes
- Enhanced cooling performance by lamination



MAJOR INVESTMENT IN BATTERY TECH

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NEC
NEC/TOKIN



Automotive Energy Supply Corporation

NISSAN

NISSAN AND NEC JOINT VENTURE - AESC - STARTS OPERATIONS 12.0 billion yen investment to mass produce advanced lithium-ion batteries

TOKYO (May 19, 2008) – Nissan Motor Co., Ltd., NEC Corporation, and its subsidiary NEC TOKIN Corporation, today announced that its joint-venture company – Automotive Energy Supply Corporation (AESC) – has begun full operations. AESC's start of operation follows the announcement of the joint-venture in April 2007.



THE NISSAN EV

All the feature customers have come to expect:

**Compact
Car Size**

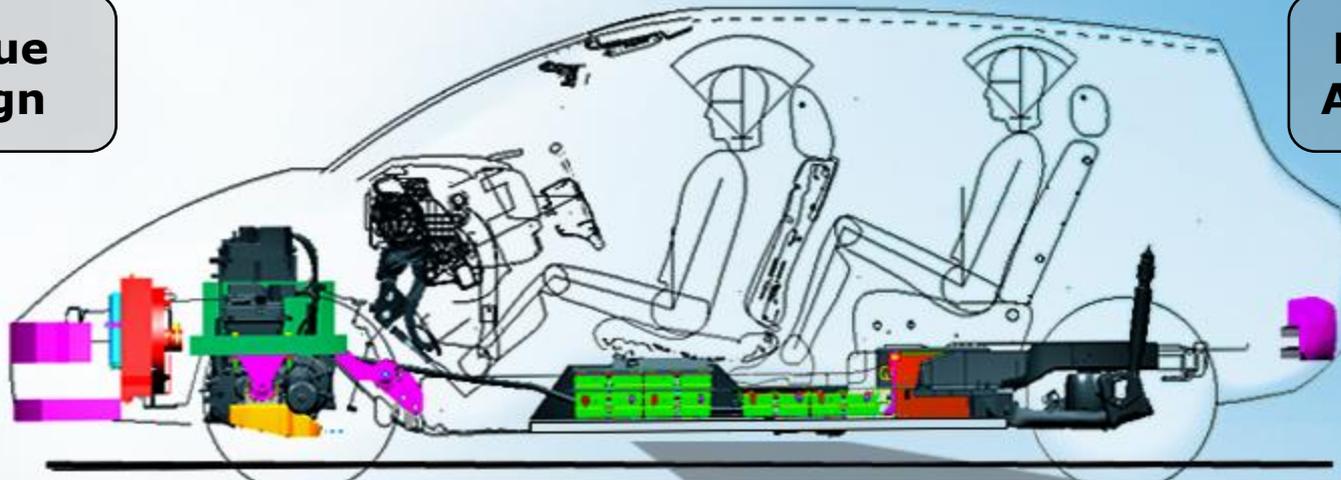
**Space For
5 People**

**100-Mile
Range**

**Advanced
Safety
Features**

**Unique
Design**

**Premium
Amenities**



BENEFITS TO THE CONSUMER

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- True zero-emission vehicle
- No price premiums
- Lower Total Cost of Ownership than a comparable Internal Combustion Engine
- Lower maintenance costs than an ICE vehicle (Less complexity, no engine, no oil changes)

**Electric Vehicle DOE MPG rating:
367 mpg equivalent***

Cost per mile comparison (15k miles):

- Car (good 30mpg, \$4/gal) = \$0.13 per mile / \$1,950
- EV (high \$0.14 kWh) = \$0.04 per mile / \$600

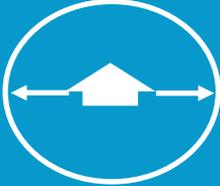
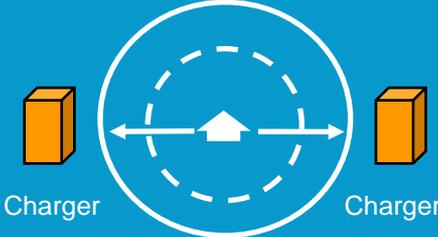
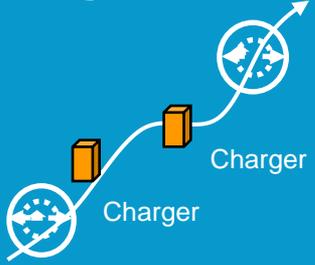
Advantage exists even if gasoline drops below \$1.10/gal



* DOE Code of Federal Regulations, Section 10, Part 474

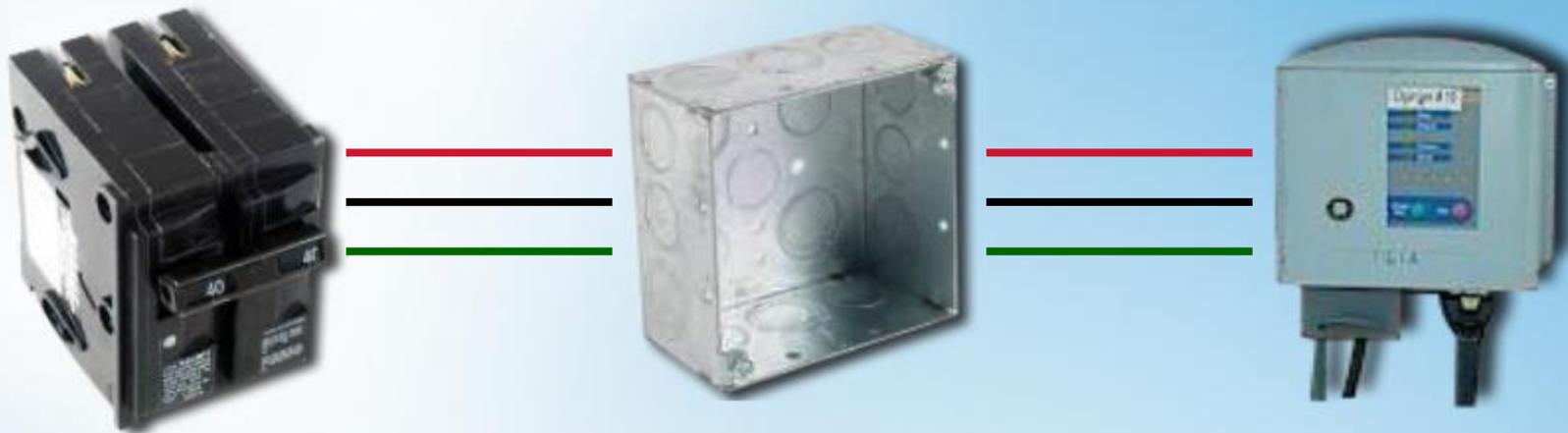


CHARGING NETWORK CONCEPT

	Home Charging	Charging Network	
		Destination Charging	Pathway Charging
EV Usage	Short Distance 	Mid Distance 	Long Distance 
Charger Type	Normal	Normal or Quick (depends on stay time)	Quick
Charging Site	Home Office	Super Market, Mall Restaurant or Parking Lot	Major Road Highway Service Area

LEVEL 2 – CHARGING CIRCUIT

- Special electrical work required to install, but 208/240V power is available at home and business
- To meet USA electric code the Level 2 EVSE must be “hard-wired” to the grid



WHEN WILL NISSAN'S EV BE AVAILABLE?

- Nissan will partner with select public and private organizations to make EVs available for fleet/commercial use in 2010 and 2011
- Regionally, individual retail sales may begin as soon as late 2010 if the infrastructure is ready
- EVs will be mass marketed to individual consumers in 2012

2008	2009	2010	2011	2012
	Today	SOP/SOS		Mass Market Sales



A blue arrow points from the 2009 column to the 2012 column. A blue circle labeled 'Fall' is positioned on the arrow in the 2010 column.

WHERE WILL NISSAN'S EV BE AVAILABLE?

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- Nissan is selecting these early markets, not as a trial, but as real markets of opportunity.
- Early markets are selected via favorable demographics, environmental mindset, public/private support and cooperative utilities to work together on infrastructure rollout.
- Current partnerships include:
 - State of Tennessee
 - State of Oregon
 - Sonoma County
 - Tucson metro area
 - Phoenix metro area
 - San Diego metro area
 - City of Seattle
 - Progress Energy & Advanced Energy – Raleigh NC
 - District of Columbia
 - And more to come...



EACH PARTNER'S STRENGTHS CAN BE LEVERAGED

Nissan

- Electric vehicle
- Battery
- EV knowledge & support

State or Region

- Promote EV awareness
- Infrastructure support
- Legislation/Incentives
- Public education
- EV fleet vehicles

A SUSTAINABLE
FUTURE REQUIRES
ALL STAKEHOLDERS
WORKING TOGETHER

Companies

- EV fleet vehicles
- Infrastructure support
- EV awareness

Utilities

- Expand renewable electricity sources
- Capacity expansion



ZERO-EMISSION REALITY

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“Real car”

100-mile range

Launching in 18 months

Anticipate 12-15 markets at launch with mix of fleet and retail

Mass marketing by 2012

Top Secret

